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| **Technology Integration Unit/Lesson Plan Template** (modified from MTS Lesson Plan Template) |
| MPj04000470000[1]  Name: Jacki Kooistra  Subject area:Biology  Grade level:9-12  Time frame: 3 blocked periods  Lesson title: Determining Your Genetics (Part 2) |
| **Brief lesson/unit Summary/Description** |
| Using Picnik to crop pictures of themselves and then Smart Notebook software, students will create a scrapbook page of their “potential” offspring, based on punnet squares previously completed (Part 1). One day will be spent using Picnik and saving “facial features” to a local drive that any student may use. During this time they can spend some time to navigate the variety of options that Picnik offers.  After completing the cropping portion, students will then insert the facial features, ie. nose, mouth, eyes, to create a pictures of their children. |
| **State Content Standard/Benchmark addressed** [**http://doe.sd.gov/contentstandards/index.asp**](http://doe.sd.gov/contentstandards/index.asp) |
| 9-12.L.2.1. **Students are able to** predict **inheritance patterns using a single allele.** |
| **State Educational Technology Standard/Benchmark addressed** [**http://doe.sd.gov/contentstandards/NCLB/index.asp**](http://doe.sd.gov/contentstandards/NCLB/index.asp) |
| **9-12.NC.3.2 Integrate technology into school, home and community.** |
| **21st Century Skill(s)/Theme(s) addressed (see excel spreadsheet)** |
| Skills: Communication, Critical Thinking, Information Literacy  Themes:Global Awareness, Health Literacy |
| **Strategies that can teach any student** |
| |  |  |  | | --- | --- | --- | | Discussion  / | Metaphor & Simile | Storytelling | | Drawing | Mnemonic Device | Technology  / | | Field Trip | Movement | Visual Aids  / | | Games | Music | Visualization  / | | Graphic Organizers | Project-Based Instruction  / | Work Study | | Humor  / | Reciprocal Teaching | Writing  / | | Manipulative | Role Play | Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| **Students will understand (lesson/unit objectives):** |
| How to use Picnik and Smart Board notebook software to create scrapbook pages and procedures such as the “capture button”, inserting text, change of back ground, as well as how to group and ungroup pictures.. Students will use their knowledge of dominant/recessive and heterozygous/homozygous create their children. |
| **Essential Questions to guide this unit/lesson and focus teaching and learning:** |
| What is the probability your child will have \_\_\_\_\_\_\_\_\_\_\_\_\_trait? Are your traits heterozygous or homozygous? Which traits are dominant which are recessive? |
| **Technology & Web 2.0 resources needed (hardware and software, websites)** |
| Laptops, Smart Board, Smart Board software, internet, digital camera |
| **Procedure (learning activities)/ lessons of unit**  **-Students will grab a computer and log in. After logging in they will be opening the students shared folder where their pictures are located. I will show a quick demonstration to familiarize the students with the Picnik, demonstrating my expectations and the cropping process, all while the students are following along.**  **-I will then demonstrate the Smart Board Notebook software. Students are then allowed to ask questions.**  **-Students are given the rest of the class period to work while I walk around to field any questions that may arise.**  **-The next 2 class periods I will re-demonstrate how to use each program.** |
| **Assessment Method** |
| Students will be assessed by their ability to create a scrapbook-like page of their children’s pictures. They will be required to make a total of four children, two boys and two girls, using the Smart Notebook software. I will evaluate their ability the crop the pictures via Picnik.com and then make a collaboration of their peers pictures to create their offspring. |
| **Notes: *(this area may list accommodations, differentiation, as well as other key information that may not fit into the categories above)*** |
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| Comments: |